

ABSTRACT

(nb B4)

A Non-Volatile Memory circuit which functions as an interface between a key loader and an encryption device. Included in the Non-Volatile Memory circuit is a microcontroller which has an EEPROM adapted for storage of a crypto key and its corresponding checkword and also a backup crypto key and checkword. Connected to the microcontroller is a 4 MHz clock signal generator which supplies the master clock signal to the microcontroller. A pair of light emitting diodes are also connected to the microcontroller to indicate the status of a load of the crypto key within the microcontroller as well as the status of an erase of the crypto key from the microcontroller. The microcontroller is also connected to the telemeter transmitter for the missile. This allows the microcontroller to turn off the transmitter during a key load which prevents transmission of the crypto key and its corresponding checkword. When the microcontroller completes a load of the crypto key from its internal EEPROM to the encryption device and upon a launch of the missile, the software within the microcontroller erases the crypto key and its corresponding checkword from its EEPROM. This prevents an enemy force from retrieving the crypto key and its corresponding checkword from the missile after launch.